

April 12, 2005

Reply to Office Action of December 13, 2004

REMARKS

Applicants and the undersigned reviewed the Office Action carefully before preparing this response. Reconsideration is respectfully requested. Nonetheless, in light of the positions presented herein, this application is believed to be in condition for allowance.

The Examiner rejected Claims 1 and 5 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 4,119,733 ("Hsieh"). Claim 1 is amended to recite incorporation of at least one of an acid and an-acid salt with the ground soybean particulate, to clarify the Applicants' composition. In light of this amendment, Claim 2 is cancelled. Accordingly, Claim 1 is now believed in condition for allowance.

The Examiner rejected Claims 2 and 3 under 35 U.S.C. § 103(a) as being obvious over Hsieh taken together with Japanese Patent No. 40207655 ("Niitsuma"). Specifically, the Examiner states that it would have been obvious to one having ordinary skill in the art to add acid as taught by the Niitsuma reference to the Hsieh invention for the reasons specified in Niitsuma (to remove soybean odor) or to employ the salt form of the acid as a recognized alternative to obtain the claimed compositions. However, it is respectfully suggested that the cited combination and rationale is inconsistent with the teachings of either reference.

Hsieh discloses a soybean beverage base utilizing heat treatment of soybean particles between 50° and 100° C to rapidly denature the soy proteins and destroy the trypsin inhibitors. Hsieh specifically avoids prolonged soaking of the soybean material by using heat in combination with enzyme treatment to reduce processing time, to eliminate the off-flavor present in other soy beverages, and to preserve the protein content of the soybean.

April 12, 2005

Reply to Office Action of December 13, 2004

Contrary to Hsieh, the Niitsuma reference describes denatured soy protein through prolonged soaking of the soybean material and without the use of heat, to preserve the nutritional content of the soybean components. (A translation of the complete reference was provided in the Information Disclosure Statement submitted on February 17, 2004.) Indeed, heating raw soybeans or soybean powder, as described in Hsieh, is cited in the Niitsuma reference as a distinct disadvantage in the prior art. Specifically, the Niitsuma reference underscores the desire to preserve vitamins and lecithin, components that are sensitive to heat and that are eliminated when heated at 50° C or higher (See page 4, 9). To overcome the disadvantages of the prior art, the Niitsuma reference teaches pulverized soybeans soaked in a vinegar (acetic acid) solution or, alternatively, a citric acid solution to denature the proteins. As a further departure from Hsieh, denaturing with vinegar can take up to 2 hours, and denaturing with citric acid can take up to twelve hours (See page 9). After soaking, the mixture is neutralized with sodium bicarbonate before the composition is consumable.

In light of the foregoing, Applicants respectfully disagree with the Examiner's assertion that the present claims, in particular Claims 1 and 3, are obvious in light of Hsieh and Niitsuma because the Examiner has not established a prima facie case of obviousness. There is simply no suggestion, motivation, or teaching to combine the Hsieh and Niitsuma references. The Niitsuma reference specifically teaches away from heat or temperatures greater than 50° C compositionally to preserve valuable nutritional components. Further, the Hsieh reference does not teach or suggest one skilled in the art to use a prolonged acid-soaked, denatured soybean material. Indeed, the combination of Hsieh and Niitsuma references destroys the underlying function and compositional intent of either reference, making the combination untenable. As such, it is believed that Claims 1 and 3 are in condition for allowance at this time.

April 12, 2005

Reply to Office Action of December 13, 2004

The Examiner also rejected Claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Hsieh in further view of U.S. Patent No. 3,941,890 ("Drachenberg"). Applicants respectfully disagree with the Examiner's conclusion. First, there is no motivation to combine the teachings of either reference. In particular, the heart of the Hsieh reference is grinding of the soybeans, and heat treatment after the soybean material is mixed with hot water, see Col. 3, lines 17-37. In Hsieh, this soaking/heat treatment step is included to inactivate the trypsin inhibitors and is critical to maximizing recovery of the protein. Indeed, maximum recovery of the protein is required, in part, to improve emulsification of the final product, see Col. 3, lines 11-13. In contrast, Drachenberg discloses a process in which the dry beans are heat treated in a microwave prior to being mashed, a step stated as critically important in preparation of the final product, see Col. 3, lines 10-49. In Drachenberg, this heat treatment is followed by a longer, more conventional soaking step.

Thus, these references provide alternate and incompatible methods for achieving a soy composition. Specifically, one would not turn from Hsieh to Drachenberg, as Hsieh provides an alternative to the soaking step of Drachenberg. Further, the teachings of Hsieh do not motivate one skilled in the art to employ the microwaving step of Drachenberg as an alternative to the grinding and heat treatment step required by Hsieh. Indeed, Applicants assert that a reading of Hsieh teaches away from any combination with the Drachenberg reference, and vice versa. Thus, the proposed combination is contrary to the teachings of either reference. Certainly, switching back and forth between divergent methods neither taught nor suggested by Hsieh.

Further, one skilled in the art would not look from Hsieh to Drachenberg for the purposes of including a stabilizer, suspension agent and/or emulsifier, as Hsieh describes recovery of protein as a means for improving emulsification of the product. Accordingly, Hsieh does not teach or suggest the addition of a stabilizer and/or an emulsifier.

April 12, 2005

Reply to Office Action of December 13, 2004

Finally, in light of the above recited amendments, Claim 1 is not anticipated or obvious in light of a reading of Hsieh. In particular, Hsieh does not disclose, teach or suggest each and every element of Claim 1. Drachenberg does not add or suggest to one skilled in the art every element of Claim 1 or Claim 4. In particular, neither Hsieh nor Drachenberg teach or suggest the incorporation of an acid or an acid salt into the soy particulate. Accordingly, it is asserted that Claims 1 and 4 are not obvious in light of Hsieh, Drachenberg or any combination thereof.

The Examiner also rejected Claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Hsieh in further view of any one of Crank et al., Jolivet et al. and Wagner et al. The teachings of Crank, Jolivet and/or Wagner do not suggest modification of Hsieh or any combination thereof that would anticipate or make obvious Claim 1. Further, in light of the preceding, as the Hsieh reference should be withdrawn, any combination with Crank, Jolivet and/or Wagner is, likewise, inappropriate. Therefore, Applicants assert that Claim 1, in addition to dependent Claim 6, is not obvious in further view of Crank, Jolivet and/or Wagner and is thus patentable thereover.

The Examiner also rejected Claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Hsieh in further view of Koga et al. However, the teachings of Koga do not suggest modification of Hsieh or any combination thereof that would anticipate or make obvious Claim 1. Further, in light of the preceding, as the Hsieh reference should be withdrawn, any combination with Koga is also inappropriate. Therefore, Applicant asserts that Claims 1 and 7 are not obvious in further view of Koga and are thus patentable thereover.

Finally, Applicants hereby submit a Terminal Disclaimer in compliance with 37 CFR 1.321(c) to overcome the double patenting rejection of Claims 1-3, 4 and 5 over Claims 1, 2 and 5 of U.S. Patent No. 6,322,846 (either alone or in combination with Drachenberg). The conflicting patent, U.S. Patent No. 6,322,846 and the present

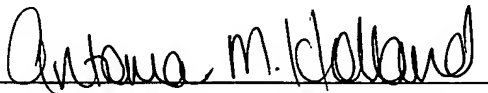
April 12, 2005

Reply to Office Action of December 13, 2004

application, 10/737,225, are both owned by Jeneil Biotech Inc. In view of the filing of the Terminal Disclaimer and the common ownership of the cited patent and the present application, the withdrawal of the obviousness-type double patenting rejections of the claims is respectfully requested.

Accordingly, Claims 1-7 are believed to be in condition for allowance. Consistent therewith, a favorable action is respectfully requested. The Examiner is invited to contact the undersigned by telephone should any issue remain. Thank you for your help and consideration.

Respectfully submitted,

BY 

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